

PREWEAKENED AUTOMOTIVE INTERIOR TRIM PIECE FOR COVERING AN AIR BAG INSTALLATION IN AN AUTOMOTIVE VEHICLE

Abstract of the Disclosure

A process for preweakening the inside of an automotive trim piece cover layer of various constructions by use of a laser beam so as to enable formation of an air bag deployment opening in the trim piece formed at the time the air bag deploys. The laser beam impinges the inside surface of the cover to form a groove scoring or spaced perforations to form a preweakening pattern. A robot arm may be used to move a laser generator so as to form the preweakening pattern. The laser beam can be controlled in accordance with sensed conditions to achieve accurate preweakening, and may also be used to trim substrate panels and to perform other cutting operations.